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BULLETIN

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The Cover

● The cover portrait, by Joseph F. Schwarting, pays tribute to Sigmund Freud (1856-1939).

● Freud's teaching influenced the development of psychiatry and provided the foundation for psychoanalysis. The impact of his doctrines is indisputable. A later generation of scientists with the advantage of retrospection may determine more exactly the dimensions of his contribution. Although some concepts remain controversial, research studies on personality integration have been predicated upon at least partial acceptance of Freudian theory. A discussion of some of these tenets is included in an article on psychosexual development which begins on page 87 of this issue.

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THE DEAF CHILD

● THERE ARE MANY problems involved in the treatment of a child with a severe hearing impairment. This treatment usually resolves into a planned program for the handicapped child rather than the correction of the handicap.

Immediate problems of the family physician include determination of the etiology of the deafness, differential diagnosis, age of onset, degree of hearing loss, and type of hearing loss. A knowledge of these will enable the physician to guide both parent and child into a pattern of living best suited to the individual needs of the handicapped child.

Etiology

Congenital and adventitious deafness are the two forms of hearing deficiency. A discrimination between the two types is necessary in planning treatment for each individual patient. Congenital deafness is attributed to a number of causes, most of which involve damage to the eighth nerve. The causes include prenatal infection, injury, or malformation of the auditory mechanism. Adventitious deafness results from childhood diseases, ear infections, enlarged adenoids, nasal allergy, or accidents.

Differential diagnosis

Differential diagnosis in the very young child is often difficult. Until recent developments in methods of testing, deafness was commonly confused with several conditions characterized by lack of speech or a disregard for sound. These conditions,

however, are also symptomatic of aphasia, amentia, idiocy, autism, or schizophrenia. An indication of the frequency of error in diagnosis is reported in a study by Mykelbust. Of all children with poor speech development who were brought to a hearing center, only fifty per cent had congenital deafness.

Some points of differential diagnosis in patients with symptomatic similarities should be considered. For example, the aphasic child is often retarded developmentally. The response to sound may be inconsistent, erratic, infrequent, or entirely volitional. Although words may be imitated, there is no ability to formulate thoughts and ideas. An emotional disorder such as hysteria, autism, or schizophrenia may often be diagnosed as deafness. The emotionally disturbed patient is so withdrawn and out of contact with his environment that he may make no response to sound, even at pain level. There is no startled pupillary response or shedding of tears. In the mentally deficient child, there is a consistent response at the level of capacity, but this level may not exceed the babbling or crying stage. In addition, the response is no greater than the level of verbal expression.

No child should be sent to a school for the deaf or to a school for the mentally retarded without a thorough and exhaustive examination by a competent otologist. With improved testing devices, the otologist can make an accurate analysis of hearing impairment. There are, however, simple

tests that can be made by the family physician, although these tests are not comprehensive enough to afford accurate diagnosis. These tests require only the use of a tuning fork or a variety of noisemakers to give a variety of pitch, intensity, and tone. The noise is sounded at various distances and parts of the room to determine whether the child is attracted in any way. To gain the child's interest, games may be introduced. Thus, the child can be conditioned to drop a marble into a jar each time a noise is heard. From his response, the physician can ascertain some degree of hearing ability.

Since deafness affects the patient's personal, social, and family life, and his vocation, some follow-up procedure should be outlined by the physician after the medical survey.

Planned programs for the deaf child

The age of onset and the degree of hearing loss are of major importance in planning a program for the deaf patient. Since language deficiency is an obstacle, any word patterns and speech awareness the adventitiously deaf may have attained must be kept. In the training program, the parent should realize the value of speaking to the child. Speaking in complete sentences is important to development of the deaf child.

Speech is equally important to the congenitally deaf child in the correlation of movements of the mouth and tongue with objects, acts, and ideas. Although only forty per cent of the





speech sounds are visible on the lips, this forty per cent must be made visible to the child. Subject matter varies only slightly from that of a hearing child, in the beginning, as it should relate directly to immediate objects and actions.

If any degree of hearing can be utilized with a hearing aid, it should be used in coordination with special training. Actually, the earlier a hearing aid is used, the greater is the chance for more normal communication. The wearing of a hearing aid without the necessary auditory training is of little value to the extremely hard of hearing. The benefit of a hearing aid is determined by a pure tone audiometric test and various speech tests. In a purely conductive type loss, a hearing aid may be beneficial if the bone conduction curve is normal or almost normal, and if the word discrimination score on intelligibility of speech with amplification is ninety per cent correct or better. Even under optimal conditions, however, a person will never hear normally with a hearing aid.

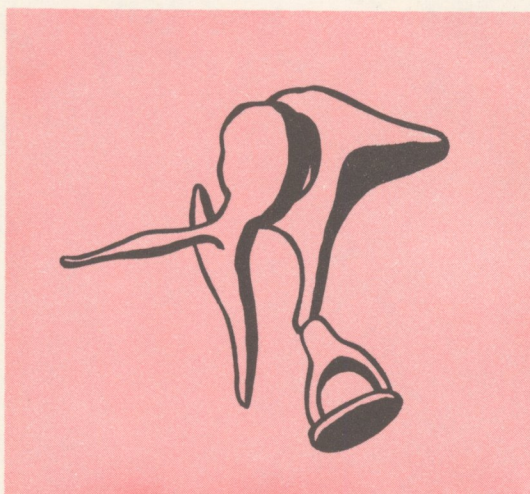
In conjunction with teaching the use of a hearing aid, the auditory training should 1) encourage careful listening, 2) utilize fully all residual hearing, 3) re-establish the awareness of speech distinctions, 4) habituate rapid recognition of these distinctions, 5) add meaning to sounds and speech, 6) provide experience with amplified sounds, 7) build tolerance to louder sounds, and 8) afford practice in localizing sounds.

Emotional problems

Deafness causes a number of emotional problems for both child and parent. For example, socialization is an outstanding need of the young deaf patient. If there are no pre-school nurseries for the deaf in the immediate vicinity, day nursery experiences with hearing children are still desirable, because language has not become a barrier to young children of pre-school age.

Self-reliance should be encouraged in any child, and especially in the deaf child. Most important, the deaf individual should not be made to suffer from an impatient or over-protective attitude from the parent. He should be encouraged to develop normally in activities such as toilet training, feeding, and self-care.

Frustrations and tensions mounting from the inability to communicate satisfactorily often initiate personality changes. Isolation imposed upon the deaf individual may cause the sensitive person to interpret surrounding conversation as personal criticism and ridicule. Intensification of such feelings may later result in severe paranoid reactions. The young deaf child may react with such



undesirable behavior patterns as seemingly deliberate disobedience, belligerence, irresponsibility, and frequent temper tantrums. As a result, the parent frequently develops a genuine dislike for this individual.

Acceptance of a diagnosis of deafness is another parental problem. The difficulty of acceptance, may precipitate more subtle conflicts in the parent such as feelings of guilt, or being "to blame," or a feeling of being punished for some past mistake.

Another common concern of the parent is the future of the deaf child. There is a fear as to whether this individual will be able to find a place in society as a self-supporting citizen.

The family physician can alleviate many of these difficulties of the parent with a deaf child. Given a genuine understanding of the overall problem, the parent will be able to play an important role in directing the child toward his optimum capacity for learning and self-sufficiency. Understanding and acceptance are essential for the emotional development and self motivation of deaf children.

Areas in which the parent may ready an individual for formal training are in developing his sense of sight, taste, touch, smell, heat, vibrations, motion, weight, and flexibility. The parent should provide as

many experiences as possible in these areas of perception and activity.

Clarification of the immediate and long term objectives as well as actual potentialities of the child should be pointed out. Deafness is primarily a handicap in communication and without communication there is a definite learning disability. Should the physician consider his background inadequate to counsel the parent, there are various sources of information to which the parent may be referred. Many of the larger metropolitan areas incorporate special classes for the deaf into the public school system at both nursery and upper grade levels. In addition, some of the state supported schools for the deaf offer short courses for parents of the deaf. These courses give practical information concerning present status and future expectations of nonhearing children, their emotional, educational, and social needs, and an analysis of a program designed for the individual needs.

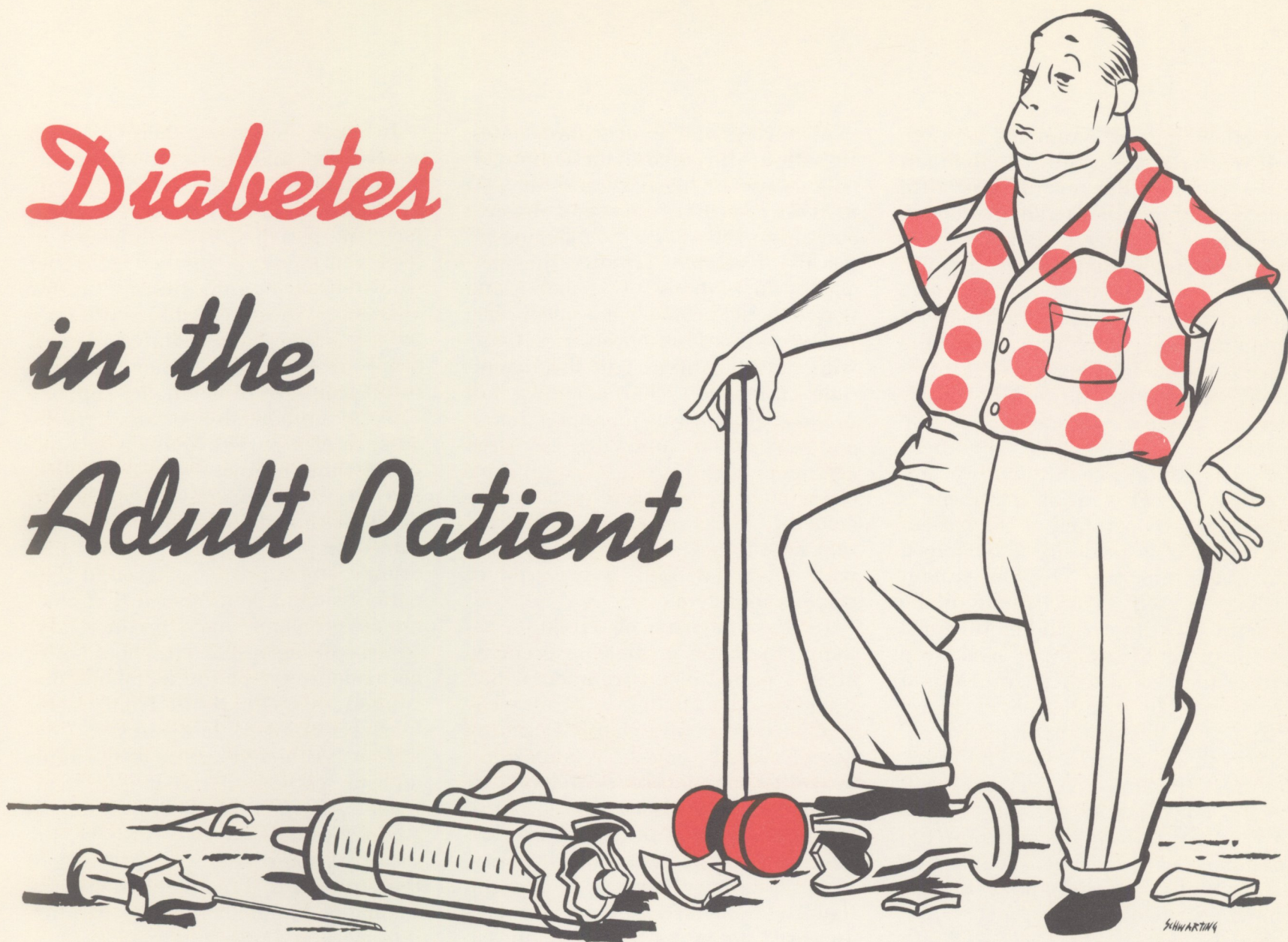
Since the handicap of deafness is not remediable in the majority of cases, the problem of the physician is primarily one of giving information or sources of information to fit the specific needs of this handicapped patient. The deaf child, if guided properly, is capable of becoming an integral part of a hearing society.

Suggested Reading

- Gesell, A. and Amatruda, C.S.: *Developmental Diagnosis*, New York, Paul B. Hoeber, Inc., 1951, p. 269.
- Hamilton, L. Jr.: Facilities for the Child with Loss of Hearing, *Connecticut Health Bull.* 67:31 (Feb.) 1953.
- Hayman, R., et al: Hearing Program for Children, *Am. J. Pub. Health* 41:1509 (Dec.) 1951.
- Jooste, H. S.: The Rehabilitation of the Deaf, *South African M. J.* 30:450 (May) 1956.
- Kanner, L.: *Child Psychiatry*, Springfield, Ill., Charles C. Thomas Co., 1950, p. 493.
- Kessler, H.: *The Principles and Practices of Rehabilitation*, Philadelphia, Lea and Febiger Co., 1950, p. 413.
- Laing, M.: Private Speech and Hearing Services, *Maryland M. J.* 5:280 (May) 1956.
- Mikell, S.: The Detection and Correction of Hearing Loss in the Younger Child, *Arizona Med.* 9:23 (Nov.) 1952.
- Milman, D. H.: Psychologic Aspects of Pediatrics, *J. Pediat.* 41:113 (July) 1952.
- Myers, D.: The Deaf Child, *M. Clin. North America* 36:1787 (Nov.) 1952.
- Podolsky, E.: Emotional Problems of the Hard of Hearing, *Eye, Ear, Nose & Throat Monthly* 30:596 (Nov.) 1951.
- Wishik, S. M.: Role of the General Practitioner and Specialist in Care of Physically Handicapped Children, *Am. J. Dis. Child.* 86:447 (Oct.) 1953.
- Yates, J.: Conservation of Hearing in Children, *Texas State J. Med.* 48:133 (March) 1952.

Diabetes

in the Adult Patient



● ALTHOUGH DIABETES may develop in childhood, it is characteristically a disorder of middle life. The incidence of diabetes is increased in the older age groups. In adults, diabetes differs somewhat from the disease in children. Adult diabetes is generally less severe in onset and less labile in clinical course.

Although the causes of diabetes are not fully determined, factors to be considered in the development of the disease include heredity, age, sex, race, occupation, obesity, and circumstances which subject a predisposed individual to stress. Stressful situations include trauma, fever, surgical operation, pregnancy, and hyperthyroidism. The high incidence of diabetes in particular families suggests that this disease may be inherited as a simple Mendelian recessive characteristic. There is a tendency in these families, however, for diabetes to occur earlier in each succeeding generation. In females between the ages of forty and fifty,

diabetes frequently occurs at the menopause. At the age of twenty, the incidence rate in females begins to outnumber the occurrence in male population. By the age of forty-five to sixty-four, the rate of incidence in females is almost double that of males. Occupation apparently affects the occurrence of diabetes because of the tendency of some individuals to gain weight in work that requires little physical exertion. Because of the frequent association, it is suspected that obesity predisposes to diabetes. Overweight may be part of the diabetic syndrome, however. Specific causes of clinical diabetes are insulin deficiency and endocrine disturbances that affect the anterior pituitary and adrenal cortex. Although the specific cause may not be known, diabetes is a condition known to alter the metabolic process by which carbohydrates are formed and utilized.

Hyperglycemia and glycosuria occur, and nourishment is lost as a result. Excessive thirst, increase in appetite,

and general weakness commonly develop. Finally, degenerative changes such as arteriosclerosis, disease of the coronary arteries, diabetic retinitis, and peripheral neuritis may occur.

Reactions of indifference, obsessiveness, passive resistance to treatment, hostility to the physician, and rebellion against diet are frequent problems. An attitude of indifference is often a defense against extreme anxiety. Some patients may use their illness as a means to manipulate other persons in their environment, or to gain attention by becoming unnecessarily helpless. Then too, patients may fail to take proper care of themselves because of unconscious emotional conflicts.

Specific management is necessary when diabetes is discovered at puberty or during the involutional period. The success with which psychologic problems are solved is one of the major determinants of the amelioration of diabetes. Diabetes requires positive participation of the patient

for alleviation of symptoms as more self-treatment is required than in other chronic illnesses. Reassurance and education will often help diabetic patients to adjust emotionally when they are taught that proper diet and care will be conducive to more normal living and avoidance of diabetic complications. Only partial reassurance is possible during the first interview, since the physician knows neither the patient nor his specific anxieties. Realizing this, the patient may lose confidence in the physician. The psychologic aim of treatment is to gain the cooperation of the patient on the basis of his desire to be helped and most important, for the patient to help himself. The attitude of the general practitioner, therefore, must be one of kindness and understanding rather than of authoritativeness and criticism. He should also recognize that not all diabetic patients are capable of equal progress and some failures in gaining cooperation will result. For example, patients because of hostility toward a significant figure, may have repeated comas that are actually manifestations of unconscious suicidal drives.

Recent experimental evidence indicates that psychologic disorders created by situations of acute stress may produce alterations in the level of ketone bodies and in fluctuations of glucose in the venous blood. Stress, however, may affect the amount of urine excreted by diabetic or healthy individuals. Diuresis in the diabetic patient may cause a loss of glucose and electrolytes. This loss contributes significantly to the development of dehydration and may ultimately cause coma.

Hinkle has conducted a study on metabolic alterations resulting from psychologically or emotionally conflicting events. Of primary consideration were the glucose and ketone metabolism and fluid balance of patients

in disturbed and undisturbed states. In both healthy and diabetic individuals, a rise in blood ketones and an increase in urinary excretion of water and electrolytes occurred. During intervals of relative serenity the metabolic fluctuations of diabetic and non-diabetic people were negligible. In stress situations, however, patients with diabetes differed in the magnitude of reaction. For example, fall in blood glucose was more precipitous and was accompanied by increased ketonemia and diuresis. Clinical signs of incipient ketosis were occasionally evident. Moreover, it was observed that ketosis occurring in conjunction with emotional conflicts may induce acidosis and coma.

In the majority of Hinkle's patients, the onset of diabetes occurred after a period of environmental and inter-personal conflict or stress. The conflict was usually characterized by loss of persons, objects, relationships, or values previously considered by the patient as indispensable to physical and emotional security. The loss often induced feelings of hostility, usually directed toward a parental figure whose affection and support appeared to be especially required. The need for affection, therefore, was complicated by an inability to accept it. An increase in appetite was also observed in all patients when emotionally disturbed. The relation between food, mother-love, and feelings of total security is often one of close identification in early childhood, and, in some persons, this identification may persist throughout life. It appears, also, that some individuals may respond to situations of stress as though the loss represented a threat similar to the threat of starvation. In the adult diabetic patient, the subsequent pattern of metabolism may signify an adaptive, although inappropriate or inadequate response to carbohydrate deficiency.

In some instances, there may be a need for psychiatric treatment as an adjunct to routine diabetic care. The physician may recognize that, for some patients, overindulgence in food represents a method of relief from tension or indicates a need for affection. An increased appetite may be a less conscious manifestation of deeply situated dependency and may result from loss of emotional support. This symptom also occurs in the absence of a parent figure who symbolizes the ultimate source of love and care. An evaluation of the individual should include, therefore, a careful appraisal of the patient's life, history, and cultural background. The patient should be informed that emotional problems may produce glycosuria or acidosis. He should also be made aware of the metabolic disruption that can result from anger, fear, resentment, loneliness, or dejection. Although failure of the adult diabetic patient to respond to treatment is frequently the result of organic disorders, it may also be the result of some action or attitude of the physician. Treatment, therefore, should be supplemented by genuine interest and understanding.

Suggested Reading

Hinkle, L. E., et al: Studies in Diabetes Mellitus, *Psychosom. Med.* 13:160 (May-June) 1951.

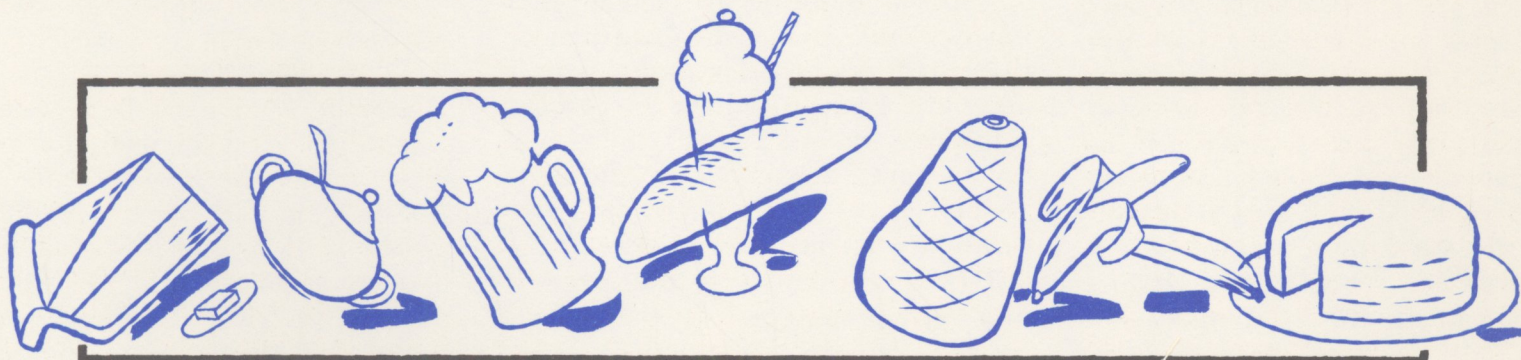
Hinkle, L. E., et al: A Summary of Experimental Evidence Relating Life Stress to Diabetes Mellitus, *J. Mt. Sinai Hosp.* 19:537 (Nov.-Dec.) 1952.

Levin, L. L., et al: Diabetes Mellitus, Conference Proceedings on Preventative Aspects of Chronic Disease, Baltimore, Commission on Chronic Illness, 1952, p. 216.

Rippy, E. L.: Therapy of Diabetes, *Modern Concepts, J. Michigan M. Soc.* 53:1097 (Oct.) 1954.

Smith, J. A., et al: Psychiatric Effects of Diabetes Occurring Late in Life, *Dis. Nerv. System* 11:278 (Sept.) 1951.

Stearns, S.: Some Emotional Aspects of the Treatment of Diabetes Mellitus and the Role of the Physician, *New England J. Med.* 249:471 (Sept. 17) 1953.





Psychosexual Development

● THE PRESENT CONCEPT of psychosexual development can be attributed almost entirely to Freud and to those who continued psychoanalytic investigation. These workers and their theories outraged critics but they provoked a changed concept of child study. The contributions of anthropologists, pediatricians, psychiatrists, and psychologists, considered together, give a generalized picture of the development of mature sexuality from primitive beginnings in infancy.

Adult personality is the result of a progressive integration. In the course of this integration, the individual's psychosexual evolution will

have been variously conditioned, and the sexual and aggressive drives modified by factors outside his control. These drives are not only biologic and psychologic forces, but are also the means for expression and discharge of seemingly unrelated emotions. Saul says, "The capacity for loving, for object interests, for the enjoyment of productive, responsible attitudes and activities—this is an attribute of maturity, an expression of the overflow in the adult of the biologic energies which had previously been devoted to his own growth and development." Normal maturity presupposes adult sexuality, social

adaptation, and an unimpaired developmental process that has not been arrested overlong at any one period. Actually, all adult neurotics are in some way impeded or damaged in psychosexual function. As a result, they find the mutuality of adult love difficult to accept.

Obviously the stages in the developmental process are not clearly separated and recognizable at onset and conclusion. Likewise, the age levels of such periods are not sharply defined. The phases merge and overlap in individual maturation, and each may vary in duration, may be checked, or the learning process may

be redirected. Environmental factors sometimes inhibit progress or may provoke actual recessive periods. An "ebb" in development can be complete—psychologic, emotional, and behavioral—but normally such regressions are partial and are effected symbolically. The whole span of the psychosexual developmental process can be subdivided into periods according to the approximate chronologic age at which any particular manifestation can be expected to occur, or in which any particular influence may be dominant.

The pregenital stages

The degree of conditioning imposed upon unborn infants is the subject of considerable study and speculation. Besides the known physical fact that traumatic experiences to the mother do increase fetal heart rate and kicking activity, little has been proved about psychologic influences during fetal development.

The infantile period is considered to encompass the developmental stages up to the age of three years. From birth until 12 to 24 months the human infant's sensations of pleasure are, for the most part, oral ones, and, to a lesser degree, cutaneous. Being bathed, diapered, handled, and cuddled contribute to the infant's sense of safety, but his principal activities and feelings are with his mouth. Sucking and, subsequently, biting motions are predominant. His existence is necessarily a receptive one and his feeding is the focal point of his existence. The mother-child relationship is especially important in the development of trust. The infant needs to be certain of her willingness to administer to his needs or he may develop defeatist or pessimistic attitudes. Kanner has termed this a cannibalistic phase, wherein the function is that of receiving and of incorporating into the body. From midway in this period of babyhood until approximately 36 months an additional body activity becomes a source of both pleasure and discomfort. In these latter months a baby's excretory functions begin to be significant to him and the anal region becomes an erogenous zone.

With the beginning of toilet training the socialization process also begins. In early infancy elimination is a pleasurable or a painful activity.

With training, the body function comes also to be associated with the mother-relationship and, gradually, with expression of both hostility and affection. In the second year of life, the infant, while developing muscular control and coordination, has particular attention directed to the anal area and to the contradictory impulses of retention and elimination. Training that is begun too early or that is too severe may impede the child's efforts at self-control and affect his subsequent patterns of self-discipline or of independent choice.

The infantile period is sometimes called the narcissistic or autoerotic period for this reason. The child at this time has had his mother's attention, love, and care, and has been necessarily receptive. The objects, then, of his wishes are limited. When, however, he is not being fed, he learns to suck upon his own fingers and toes and, in that fashion, attempts to gratify his own needs. Extranutritional sucking and mouthing motions are normal, according to Brazelton, and do not indicate any extreme of frustration or tension. This is actually the infant's first vestige of independence from his environment in what is sometimes designated as the oral erotic stage. As his sexuality is predicated principally upon his sucking mechanism, his aggressive activity is, at this period, discharged in biting. In the period of anality, retention or expulsion of feces is the comparable mechanism of expression. In either case the release or the gratification is still self-centered. In the normal adult some traces of pregenitality will remain. When imbalance exists, the presumably adult person may demonstrate orality or anality in modes that range from nailbiting to miserliness.

In the infantile period are the beginnings of trust, guilt, autonomy, doubt and shame. After 20 years the traces may be seen in adults who require praise and depend upon receiving it, or in adults who express anger and contempt by the use of profanities that refer to fecal matter.

From the genital stage of puberty

Between the ages of three and six or seven years a child's sexuality is directed to the genital areas. Some investigators refer to this period as a phallic phase. At first the child's

interest is limited to himself and his own body sensations, although later, interest in other individuals begins. The first objects of sexual interest are the child's parents. Previously, the mother had been the source of comfort, pleasure, and relief. The father had next been incorporated into the child's world which, during infancy, amounted only to gratification of immediate needs. At the genital stage, however, the parents become love-objects in a different sense. At this time a child begins to identify himself with the parent of the same sex, and, in the normal course of development, his libidinal interest is invested in the parent of the opposite sex. The parental behavior thus becomes the pattern for the child's first self-dramatizations and, as his genital impulses are directed toward a parent, so, also, are his feelings of hostility.

Sexual curiosity begins at this stage of development. In the child's increased investigations of the outer world he starts, at this time, to direct his inquisitiveness toward other people and other people's bodies. He is interested not only in the genitalia but in all of the body and all of its functions. He not only wishes to observe but to exhibit as well.

Between the ages of six and ten or eleven there is a quiescent period in the psychosexual developmental process, "the long delay before physical sexual maturation." Before this time the child has begun to learn to repress some of his feelings; prohibitions have been imposed on some of his methods of expression; and conventions have made it necessary for him to further his social adjustment. Therefore, at this time, he is trying to remove from conscious thought many of his sexual wishes and impulses. His parent-identification is increased, but his earlier attempts at physical proximity to the parent of the opposite sex become manifested only in tenderness or consideration.

The child has, by this time, a developing conscience, and the sublimation process, begun in the previous stage, now serves to divert his interests and affections from an openly sexual content. The fantasy life of the individual has also begun before the age of six, but in this period becomes a more important outlet. Some

of the more serious emotional disturbances of adult life are products of the fantasy period, disturbances such as kleptomania for example.

At this period parental direction is particularly important in turning the child to activities that are socially acceptable. Parental inadequacy at this point may contribute to the development of abnormal emotional patterns, failure to acquire any measure of idealism or humanism, or to an unnatural adherence to the family as the focus of sexual fantasy.

At puberty, between the ages of 10 to 13 or 14, all the earlier phases of development are integrated toward psychosexual maturation. At puberty also begins the gradual detachment from the parents that, in the healthy personality, is achieved at the approximate age of 19 years. An adult who remains conspicuously attached, emotionally, to a parent or parent-substitute is also an insecure adult, and an immature personality.

Adolescence

In the years between 13 and 19 the individual approaches physical maturity. His personality integration is not complete, and, particularly in the earlier years of the period, regressions may occur. The increased self-interest attendant upon adolescence brings about conflict, and the individual may return to fantasy life or to autoerotic practices. In societies in which sexual gratification is postponed until adulthood there is a tendency to form social groups of the same sex, with resultant over-intensity of friendships. While such relationships are seldom long-lasting they may dispose the individual to homoeroticism. It has been suggested that such relationships, however, serve to

complete the severance of the sexual life from its attachment with parental figures to that of contemporaries. Adolescents are still in what Perlowitz calls the stage of homosexuality that began with the genital phase and that normally terminates in adult hetero-sexuality.

In heterosexual relationships, adolescent kissing, fondling, and other such manifestations are evidences of earlier patterns of behavior, and become, finally, part of adult sexual activity, contributory to genital gratification. In abnormal sexual development, infantile demonstrations become the principal source of sexual release in the adult. Erikson speaks of the three adjustments to be made after puberty, which are: reconciliation of genital orgasm and extragenital sexual requirements, reconciliation of love and sexuality, and reconciliation of sexual, procreative, and work-productive patterns. According to Kanner, among the factors that affect psychosexual development are variations in sexual constitution, fixations, the means chosen of repression and sublimation, traumatic experiences, and spontaneous shortening of the period of latency.

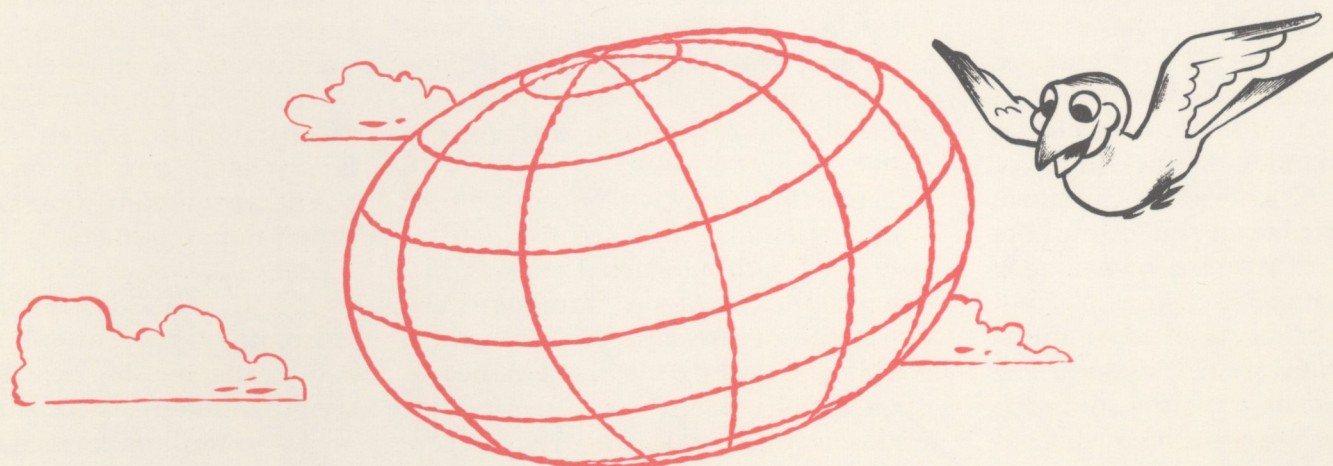
Conclusion

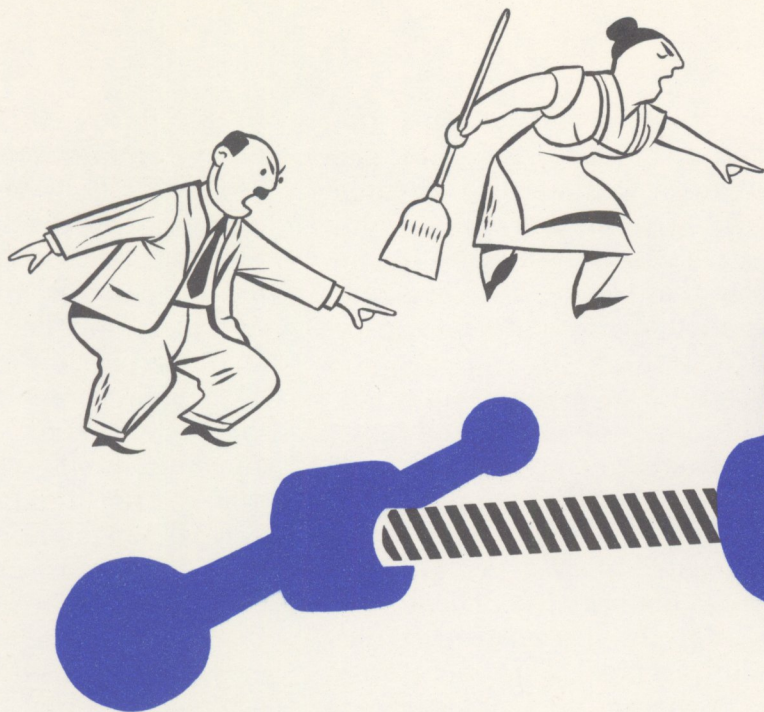
In the organization of the adult personality there will be, of course, some residuum from each of the stages, such as vestigial infantility and homosexuality. This does not imply abnormality. Conscience, tradition, and society have all influenced the individual from birth to maturity; nevertheless, no really strong attachment of libidinal significance to organ or object is ever completely dissociated from its earlier connotations.

In the adult, intelligence is not necessarily commensurate with emotional behavior. Erikson says, "... just as the modes of adult genitality may bear the more or less distorting imprint of early organmode experiences, so a man's intellectuality may be... characterized by the under- or over-development of one or the other of the basic modes." For example, for an adult intelligent married man to practice masturbation is neither abnormal nor significant. But, if this is not only his entire sexual outlet but continues to be that of his choice a serious developmental disturbance may be assumed. Adult neurotics demonstrate, unconsciously, pregenital sexuality, and mutual sexual expression is not possible for them. They have adhered to an infantile pattern of autonomy and of gratification. Unconscious repetition of early behavior patterns motivates much adult emotionality. Psychosexual development can only be understood in terms of related attitudes, habits, and circumstances.

Suggested Reading

- Brazelton, T. B.: Sucking in Infancy, *Pediatrics* 17:400 (March) 1956.
- Brenner, C.: An Elementary Textbook of Psychoanalysis, New York, International Universities Press, Inc., 1955, p. 25.
- Erikson, E. H.: *Childhood and Society*, New York, W. W. Norton & Company, Inc., 1950, p. 44.
- Glover, E.: On the Early Development of Mind, New York, International Universities Press, Inc., 1956, p. 1.
- Kanner, L.: *Child Psychiatry*, 2nd ed., Springfield, Charles C Thomas, 1950, p. 99.
- Laughlin, H. P.: *The Neuroses in Clinical Practice*, Philadelphia, W. B. Saunders Company, 1956, p. 125.
- Menninger, K. A.: *The Human Mind*, 3rd ed. New York, Alfred A. Knopf, 1951, p. 306.
- Perlowitz, H.: Three Phases of Sexual Development, *M. Times* 84:404 (April) 1956.
- Saul, L. J.: *Emotional Maturity*, Philadelphia, J. B. Lippincott Company, 1947, p. 125.





TENSION HEADACHE

● ACCORDING TO H. A. RILEY, "If one should search for the human ill which has manifested itself most widely during all times and among all people, there can be but little doubt that headache would attain this unenviable distinction."

Until recent years the patient with headache was examined and treated by a multitude of specialists for a variety of ailments besides headache. In many instances, these treatments afforded little relief. At present, however, much more attention is directed to headache as a primary symptom of an underlying disorder.

Etiology of tension headache

Of all types of headache, tension headache is the most common. In addition, tension headache frequently precipitates or aggravates other types of headache. Although the actual cause of tension headache is unknown, several theories of etiology have been formulated. For example, Wolff believes that emotional tension may cause changes in the caliber of certain cranial arteries to produce headache. Friedman and co-authors state that "... there is good evidence that the release mechanism is psychological. On the basis of anatomical and clinical data, we can hypothesize that the attack may begin with a discharge in the cerebral hemispheres

that flows into the hypothalamus, with resultant changes in the caliber of certain cranial arteries. Probably associated with this neural mechanism are hormonal changes, which contribute to the headache." Contraction or tension of muscles of the head and neck may be an additional contributory factor.

Characteristics of tension headaches

The frequency and duration of tension headaches are variable. There are no prodromal symptoms; the headaches usually are bilateral (90 per cent), occipital or frontal; they often have a migratory character, shifting from one site to another; the pain is vague, dull, or described as a "sensation of pressure."

Associated symptoms are also extremely variable. Most commonly noted are anxiety and depression. Some physicians have reported nausea and vomiting in their patients, although these findings are not reported in every case.

Tension headaches occur most often in females and are frequently associated with menstrual periods, although the weather, fatigue, and visual complaints are cited as additional contributing factors. The headaches usually begin early in life and are constant or daily in over 50 per

cent of patients. Bed rest is infrequently necessary, and the headache does not usually cause loss of sleep.

About 75 per cent of patients with tension headache admittedly have emotional difficulties, although they usually are not conscious of the exact cause of tension. Characteristics frequently noted in such patients are intelligence, sensitivity, and emotional instability. Ogden believes that headache is directly proportional to the degree of education and inversely proportional to age.

Physical examination

Frequently a patient may believe his headache to be indicative of serious ailment, such as brain tumor or hypertension, and his first need



Therapy

While the physician is getting acquainted with his patient through interviews that will provide a complete and detailed personal history, he will probably prescribe medication for relief of the existing headache. Analgesic and sedative combinations have been successful, since these compounds raise the pain threshold and reduce emotional tension. Vasoconstrictors have not proved effective. In a recent study, favorable response to placebos was noted in 55 per cent of patients. The efficacy of any drug will depend not only on its pharmacologic action but also upon dosage, timing, and method of administration. The physician must emphasize that the drug is a relief measure and is not intended to be curative.

Obviously, the physician cannot hope to learn everything about his patient during the first visit. Initially, the physician will obtain a description of circumstances and nature of the original attack, any changes in the type of headache, and, if possible, any relationship between onset and the emotional reactions of the patient to his daily routine of family living, employment, and social activity. A complete life history of the patient will enable the physician to evaluate the importance of nervous tension as a causative factor. Allowing the patient to talk is a therapeutic as well as a diagnostic measure. As the physician ascertains the emotional reactions of the patient to economic, social, physical, or intellectual relationships, he may be able to discern the presence of hostility, guilt, or self-punishment. The headache may, for example, represent a device to get attention. Although many patients are aware of their own anxiety, they are seldom conscious of hostility, aggression, and anger, which are the most common emotional causes of tension headache.

The average person is not concerned with the processes of the body and nervous system until he suffers from some dysfunction. Because most persons are unaware of the possible effects of strains to which they are subjected, the most important aspect of therapy in tension headache is to educate the patient toward understanding of the emotions involved. Usually, simple explanations of the

effect emotions and stressful situations exert on bodily functions will provide some insight into his situation. One of the first requisites of successful therapy is that the patient understand that it is within his own power to diminish or eliminate the excessive demands to which he is subject. Nervous tension, of course, can never be completely eliminated, but it can be measurably reduced.

Tension headache with a concomitant depressive reaction is common. In such cases, of course, the patient must first be treated for relief of the depression.

Sympathetic understanding, patience, and guidance are the qualities most needed by the practicing physician. In many instances, the greatest benefit may be gained if the patient is allowed to talk out his problems and fears. The practitioner may try to persuade the patient to change his mode of life to avoid certain situations, but he should not dictate such changes to the patient. The patient should be led and not compelled to make his own decisions for change. In helping the patient find a positive approach to his problems and educating him as to management or avoidance of tension-building situations, the physician makes an important contribution to the relief of tension headache. The physician should reassure the patient and give him hope, courage, and understanding to help him avoid thoughts and actions that are harmful. The most positive way to accomplish this is to help the patient develop new habit patterns which provide relief from tension.

Suggested Reading

- Blumenthal, L. S. et al: Headache Clinic V: Tension Headache, *Am. Pract. & Digest Treat.* 4:701 (Oct.) 1953.
- Donaldson, F. A. and Waldron, W. L.: Functional Headache, *J. Louisiana State M. Soc.*, 105:360 (Sept.) 1953.
- Friedman, A. P. et al: Tension Headache, *J. Am.M.A.* 151:174 (Jan. 17) 1953.
- Friedman, A. P.: Recent Concepts in Migraine and Tension Headache, *Am. Pract. & Digest Treat.* 4:762 (Nov.) 1953.
- Friedman, A. P. and Hoch, P.: Functions of Psychiatry in the Treatment of Headache, *Am. Pract. & Digest Treat.*, 6:592 (April) 1955.
- Grenfell, R. F.: Treatment of Tension Headache, *Am. Pract. & Digest Treat.* 2:933 (Nov.) 1951.
- Kibbe, Milton H.: Tension Headaches and Their Treatment, *Dis. Nerv. System* 16:77 (March) 1955.
- Moench, L. G.: Headache, Chicago, Year Book Publishers, Inc., 1947, p. 187.
- Viets, H. R. et al: Neurology and Psychiatry in General Practice, New York, Grune and Stratton, 1950, p. 51.

is for reassurance that he is physically well. To effect this reassurance, a thorough physical and neurological examination must be performed.

If the patient requests special studies, these should be made. Deprecation of the patient's fears or requests may jeopardize further treatment, because the most important part of the treatment is psychotherapy. If the physician fails to establish rapport with his patient, he is defeated before he begins. The importance of the relationship between the physician and a patient cannot be over-emphasized. Actually, successful prevention of future attacks may depend upon the understanding of the physician and his knowledge of the patient's personality structure.



THE DANGEROUS PATIENT

ALTHOUGH ACUTE PSYCHOSIS usually is characterized by confusion, or delusions with assaultive behavior or impulsive destructive acts, most dangerous patients seen by the physician are not acute cases. Nevertheless, there is a potential hazard of physical assaults and homicidal attacks on the physician by patients who are not overt psychotic patients. Recognition of the potentially dangerous psychotic person, therefore, is of extreme importance to the general practicing physician.

Detection

There are no infallible rules for the detection of patients who are potentially dangerous. A partial evaluation of the patient's emotional problem may be made by observation of his general appearance, attitude, mood, and emotional tone, as indicated by facial expression and posture. A patient's stream of talk is indicative of emotional disturbance, if it is characterized by hyperactivity, poverty of speech, irrelevance, or incoherence. Conversation with the psychotic patient may make such psychiatric symptoms apparent as memory impairment, confabulation, or faulty perception. Impaired judgment, insight, and apperception are

other indications which may also be discovered through conversation. Usually, the greater the patient's insight into his condition, the better the prognosis, because, actually, he needs less help if he is able to describe his feelings and ideas and, sometimes, the causes for them.

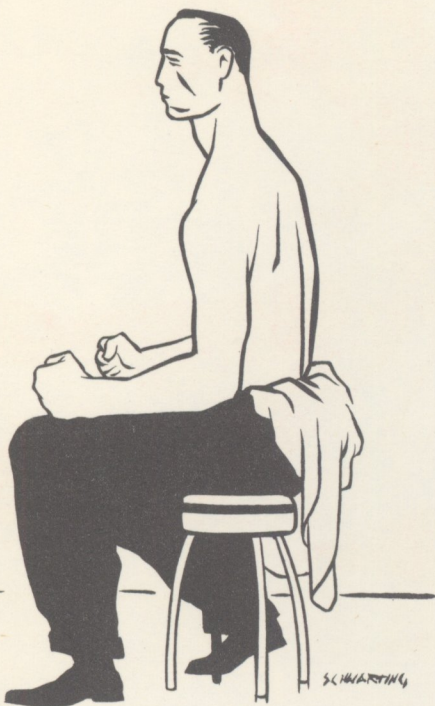
Toxic psychoses

Hypochondriacal complaints are frequent in many psychotic patients and are, sometimes, indicative of the more dangerous psychoses. If possible, a physical examination should be made to help determine whether there are organic bases for the complaints, and whether, if psychosis exists, it is toxic or functional in origin. Physical examinations, however, may be perceived as assaults and result in attacks. Such examinations, therefore, are not always possible. Toxic psychosis is caused by toxic substances that affect cerebral function and is reversible. In this group the more dangerous conditions are epileptic furor and the aggressive psychopathic states that are aggravated or induced by alcohol or drugs. A typical example is the acute pathologic intoxication in alcoholism. An alcoholic patient may develop assaultive behavior and later have com-

plete amnesia for the episode.

Among the symptoms of toxic psychosis are irritability, overalertness suggestive of anxiety or apprehension, excessive perspiration, ideas of persecution, and changes in personality, from cooperativeness to resistance. Although speech is coherent in such patients, a prime diagnostic feature is a disorientation for time, place, or circumstance. Delusions and hallucinations frequently cause patients to become dangerous.

The schizophrenic process denotes a gradual withdrawal from human contact into a fantasy life. The prepsychotic personality of the patient may be compulsive or paranoid, with strictly-controlled interpersonal relationships. As adequate adaptation has never occurred for such patients, when their security is threatened, there is intense anxiety and a tendency to withdraw into more constricted living. Preoccupation with the intellectual aspects of religion, philosophy, or science is common. Patient's reactions to normal situations often seem strange, because those situations which would distress most individuals can usually be managed efficiently and unemotionally. Conversely, minor situations create extreme excitement or



tension in the schizophrenic individual. The earlier acute manifestations of schizophrenia are confused thinking, emotional turmoil, emotion, perplexity, fear and dream states, and dissociative phenomena. These symptoms appear without apparent cause and often disappear within a few days to a month, although there is a tendency for recurrence. Repressed fears and conflicts, however, may suddenly emerge into consciousness in the form of hallucinations with subsequent homicidal activity. Patterns of behavior or mood fluctuate and a patient who, at one moment, appears to be entirely normal, may at another be antagonistic or suspicious of attempts to control or help him. Emphasis in management should be on immediate measures to protect the patient from the possibility of harm to himself or others.

The manic-depressive psychosis is characterized by fluctuations of mood which transcend normal limits from overenthusiasm to easy disappointment. A patient with this type of psychosis usually values personal relationships in terms of his own gains. His apparent disregard for the needs of other people generally lends to his rejection by them, and this rejection serves to exaggerate the pa-

tient's demands. Inhibitions against external rage are severe in such patients; therefore rage must be internalized as a depression. If integration fails, the individual will become either severely depressed or the exact opposite, in which he becomes self-assertive, indiscriminating, promiscuous, and over-enthusiastic. The excited phase is alarming to family and friends because of the patient's motor and verbal activity and his apparent lack of need for sleep. Great tact is needed in initiation of any kind of therapy because the psychotic lack of insight when associated with a feeling of well-being, makes hospitalization and supervision of such patients appear ridiculous. Attempts at control are usually met with irritability and belligerency.

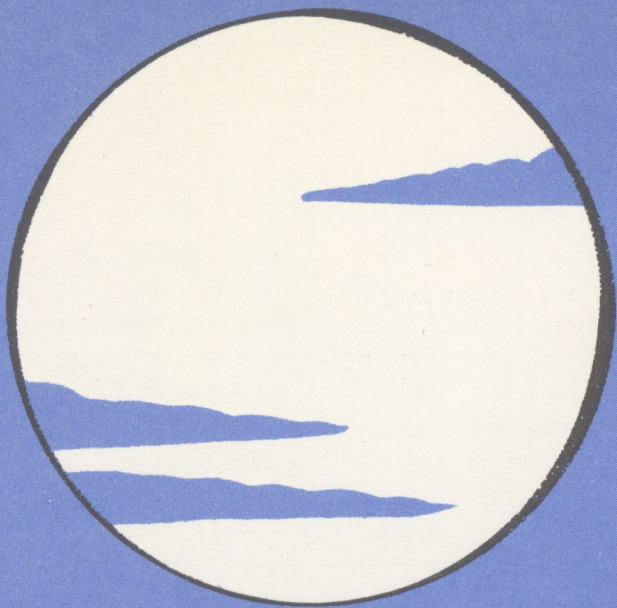
Paranoia is always inherently dangerous, the degree of danger depending upon the intensity of the patient's feeling. If, for example, the emotion is that of hatred, the greater the intensity of hatred, the more imperative is the patient's removal from society. The paranoid patient feels insecure and compensates this insecurity by creating his own world of unrealistic self-importance and a false system of rationalization. Dangerous situations occur any time that the patient's false security is threatened. The individual who fancies that he is about to be attacked must act defensively. The paranoid patient's serious misinterpretations of life situations, or his overt expressions of persecution are signs of impending danger. An equal danger exists when any patient narrows his focus of hostility from many persons to one. For example, the religious or political fanatic may decide that one particular person interferes with his plans and must be removed. Another feature of dangerous paranoia is hypochondriasis, with bizarre complaints such as "my ovaries seem dead" and "my stomach seems to be missing". Since the nature of the mental illness isolates the patient from his fellows, physical complaints provide opportunity to establish interpersonal relationships. Because the paranoid individual does not want anyone to come too close, the professional conduct of the physician may make the physician seem the ideal partner in a regulated relationship. The phy-

sician should be aware of the risk, however, in accepting the confidence of a paranoid patient who may one day become suspicious of him. As suspicion grows, the paranoid person becomes defensive and is easily motivated to attack. Another danger to the general practitioner is that of being drawn into some therapeutic modification of hypochondriacal symptoms. Therapy may be interpreted as an attack, or mutilation, or both. A sudden withdrawal of support, in the event that the general practitioner decides that he can be of no further help, may bring about still another hazard. Withdrawal may be interpreted as rejection with resultant hatred for the physician.

Homicidal behavior occurs in several psychoses because of the patient's incapability of controlling his impulses. All physicians should be prepared, therefore, to recognize the dangerous patient and to realize the possibility of impending danger in treatment of these individuals.

Suggested Reading

- Adland, M. L.: Selection of Patients for Psychiatric Referral, *M. Ann. District of Columbia* 22:289 (June) 1953.
- Amoyt, G. F., and Gee, A. M.: Public Health and Mental Health News, *Bull. Vancouver M.A.* 31:344 (June) 1955.
- Badal, D. W.: The Diagnosis and Treatment of Acute Psychotic Episodes, *M. Clin. North America* 37:579 (March) 1953.
- Bennett, A. E.: The Physician's Responsibility in the Prevention of Suicides, *Dis. Nerv. System* 15:207 (July) 1954.
- Berlin, I. N.: Some Reasons for Failures in Referral for Psychiatric Care of Patients with Psychosomatic Illnesses, *Ann. Int. Med.* 40:1165 (June) 1954.
- Harrington, J., and Mayer-Gross, W.: Emergencies in General Practice Acute Psychosis, *Brit. M.J.* 2:1320 (Nov.) 1955. *Abstract Digest Neurol. & Psychiat., Inst. of Living* 24:82 (Feb.) 1956.
- Herlihy, C. E., and Plazak, D. J.: The Recognition and Management of Psychiatric Emergencies, *U. S. Armed Forces M.J.* 7:25 (Jan.) 1956.
- Laughlin, H. P.: The Neuroses in Clinical Practice, Philadelphia, W. B. Saunders Co., 1956, p. 373.
- Lipton, M. A.: The Recognition and Management of Psychiatric Emergencies, *M. Clin. North America* 38:143 (Jan.) 1954.
- Moss, L. M., and Hamilton, D. M.: The Psychotherapy of the Suicidal Patient, *Am. J. Psychiat.* 112:814 (April-May) 1956.
- Psychiatric Disorders in General Practice, *M. Times* 80:200 (April) 1952.
- Stevenson, I., and Matthews, R. A.: Detection of the Dangerous Paranoid Patient, *Postgrad. Med.* 11:12 (Jan.) 1952.
- Symonds, P. M.: The Dynamics of Human Adjustment, New York, Appleton-Century-Crofts, Inc., 1946, p. 362.
- Thompson, G. N.: The General Practitioner and the Dangerous Patient, *GP* 11:59 (June) 1955.



DYSMENORRHEA



DIFFICULT OR PAINFUL menstruation is an extremely common complaint for which there is, as yet, no entirely successful therapy. The symptom complex of dysmenorrhea characteristically includes cramping pain, headache, lassitude, and emotional instability. Nausea and vomiting sometimes occur, and depression is often reported. The designation "primary dysmenorrhea" is used by some authors when the disorder initially occurs at the menarche, whereas "secondary" dysmenorrhea occurs after some years of normal menstrual function. Primary dysmenorrhea is used also to differentiate functional, essential, or idiopathic from acquired or organic dysmenorrhea. Actually, distinction between organic or psychogenic types is inconclusive. Even when menstrual disturbances have been medically or surgically corrected there may be no proof that the origin was not emotional nor that any lesion was sufficient to provoke the pain.

Conversely it is known that even when pelvic disorders are not demonstrable, they may still exist.

Painful menstruation may be caused by anatomic or pathologic conditions, such as cervical stenosis, uterine displacement, chronic adnexal inflammation, or uterine or ovarian tumors. Obvious pelvic disease, however, is present in only a small percentage of patients. Hormonal imbalance is believed to be significant in the etiology. Dysmenorrhea may occur after ovulation, and endocrine disorders are frequent in such cases. Sometimes there is deficient ovarian function, physical immaturity, or genital hypoplasia. Ovarian secretion is, presumably, affected by personal emotional crises, and, in the opinion of some investigators, estrogenic hormone production influences the psychologic processes that affect the individual's sexual drive. It has been suggested that at the time of the menses tension is produced and

perpetuated, and dysmenorrhea is considered a symptom of focal tension. Nervous hypersensitivity is another suggested factor that may be causative and that connotes a disorder of the autonomic nervous system. Physical reasons may account for the lowered pain threshold, but well-adjusted individuals are not affected to the same degree as less emotionally balanced patients.

For understanding of the psychodynamics of dysmenorrhea, the first consideration will be that of the patient's attitude toward or knowledge of the menstrual process, which is undeniably conditioned by the emotional experiences of puberty. At the time of the first menstruation, the psychologic and physiologic stresses to which the adolescent is subject may initiate lasting maladaptive associations. In addition to the emotional experience, the menarche is often attended by inaccurate or misguided instruction. Warnings against



swimming or bathing, for example, are comparable to the taboos of primitive societies; yet, they may be construed as sound medical instruction with resultant neurotic fears.

In adult patients with functional dysmenorrhea there may be underlying conflicts, environmental or psychosexual, such as unrecognized rejection of femininity. There may be repressed associations of guilt and distress. Anxiety and fear commonly accompany menstrual pain and are, perhaps, related to the anxieties and fears of puberty or earlier childhood, reactivated during menstruation.

Study of the patient

The physician will need to evaluate carefully both the physiologic and emotional status of a dysmenorrheic patient. Weiss has pointed out that not only a pelvic examination but a complete examination should be performed and a detailed history taken. Because of the complexity

of factors that contribute to the syndrome, and because no single therapeutic program is consistently successful, complete information will be needed as to the patient's general health, background, nutritional status, and constitutional defects, as well as to the nature and time of the discomfort. In organic dysmenorrhea, the pain is more often dull, steady, localized, and not only precedes menstruation but persists during and after the period. Functional dysmenorrhea is sometimes indicated by spasmodic pain that involves the back, abdomen, and thighs, and that abates with increased menstrual flow.

The physician will also need to understand the degree of disturbance present before any therapy is planned, because though symptomatic relief is important, it will be of no enduring value if the dysmenorrhea is only one manifestation of a more serious psychiatric disorder. Insufficient knowledge of the causative

elements may mislead the physician with results that can only alarm and discourage the patient. For instance, unwarranted surgical or mechanical procedures or a long series of injections can have a decidedly adverse psychologic effect and increase the patient's anxiety.

Treatment of patients with dysmenorrhea rarely eventuates in a permanent cure. In instances of secondary dysmenorrhea the causative organic disorder must, of course, be eliminated. However, the association with pain and anticipation of it sometimes remain and affect the patient's response. Surgical, medical, and psychiatric forms of therapy have been utilized. Presacral neurectomy, premenstrual dilatation, sedation, and hormonal therapy are all used, all with some success, some failures, and some undesirable results. Vitamins and muscle relaxants have been administered but are, in the opinion of Modell, not entirely successful.

Actually, in whatever therapy that is undertaken, the element of suggestion is of extreme importance. If the patient trusts the physician and believes in the effectiveness of the treatment he recommends, the patient's distress will probably be relieved, even if only temporarily.

Psychotherapy

The first therapeutic procedure should be one of instruction by the family physician. Ideally this would be done before the menarche as a prophylactic measure. In any instance, a great deal of misinformation and misunderstanding is prevalent as to normal menstrual function. Sometimes explanation will alleviate part of the patient's distress. To some it will be a relief to know that the pain is not indicative of serious pelvic abnormalities or diseases. With patients who have mild unrelated disorders or slight anomalies reassurance may be therapeutic. Earlier examinations or misunderstandings of previous diagnoses may have contributed to neurotic fears and fancies.

In conjunction with psychotherapy, the physician may wish to administer mild analgesics or antispasmodics. Non-addictive drugs that can relieve anxiety and raise the fatigue and pain thresholds serve for temporary relief, particularly in patients with premenstrual tension. Hormonal therapy is efficacious in some cases but should be administered only after thorough clinical studies and if proof of existing endocrine disturbance is established. If there are no known contraindications, endocrine therapy may be tried, preferably with oral instead of parenteral dosages. Hormonal therapy is most effective, seemingly, when ovulation is suppressed. In the opinion of Kroger and Freed, however, it is more desirable to raise the threshold of pain than further to disturb ovarian function.

Conclusion

Dysmenorrhea is one of the most frequent gynecological complaints and one of the most difficult to correct. In cases of refractory functional dys-

menorrhea the presence or absence of pelvic disease should first be determined and should be verified by subsequent physical examinations. If possible, prevention, by means of education, is recommended. Treatment should include some form of suggestive therapy, medical advice, instruction, and reassurance.

Suggested Reading

- Filler, W.: The Treatment of Dysmenorrhea, *M. Clin. North America* 35:861 (May) 1951.
- Haas, S.: Psychiatric Implications in Gynecology and Obstetrics, in Bellak, L.: *Psychology of Physical Illness*, New York, Grune & Stratton, 1952, p. 94.
- Ibarra, J. D., Jr. and Higginbotham, W. H.: Endocrine Therapy of Amenorrhea, Dysfunctional Uterine Bleeding, and Dysmenorrhea, *M. Clin. North America* 39:1189 (July) 1955.
- Kraines, S. H.: The Therapy of the Neuroses and Psychoses, 3rd ed., Philadelphia, Lea & Febiger, 1948, p. 30.
- Kroger, W. S. and Freed, S. C.: *Psychosomatic Gynecology*, Philadelphia, W. B. Saunders Company, 1951, p. 234.
- Miller, N. F. et al: Dysmenorrhea, *Am. J. Obst. & Gynec.* 65:505 (March) 1953.
- Modell, W.: The Relief of Symptoms, Philadelphia, W. B. Saunders Company, 1955, p. 403.
- Weiss, E. and English, O. S.: *Psychosomatic Medicine*, 2nd ed., Philadelphia, W. B. Saunders Company, 1949, p. 570.

BOOK REVIEWS

MENTAL HEALTH AND INFANT DEVELOPMENT, 2 volumes. Edited by Kenneth Soddy, M.D., Pp. 597. Price \$9. New York, Basic Books, Inc. Publishers, 1956.

The Assistant Director of the World Federation for Mental Health directed the International Seminar, held by the Federation, in Chichester, Sussex, England, from July 19 to August 10, 1952. Dr. Soddy has edited these two volumes of the proceedings of the meetings at Bishop Otter Training College. The first volume includes all of the lectures, in reduced form, and in the second volume 13 case histories are cited. The teaching staff at this meeting included 16 resident and 17 visiting members, who instructed visitors from 30 countries. The material is all based on studies of actual children in the first two years of life, and film and reading references are given.

The volumes may be purchased separately. Together they provide an

impressive amount of fresh material on infancy and childhood in three different cultures. The introduction to the case studies is by Margaret Mead, Ph. D., Sc. D.

ON THE EARLY DEVELOPMENT OF MIND. By E. Glover, M. D. Pp. 483. Price \$7.50. New York, International Universities Press, Inc., 1956.

This volume, the first of an intended series of such collections, contains 28 papers selected from the author's articles and addresses between 1924 and 1954. Dr. Glover has arranged the contributions chronologically, edited the papers to avoid repetition, and has made corrections and emendations in the footnotes. The volume is fully documented, well-indexed, and an interesting account of some of the developments of psychoanalytic theory. Readers of THE PSYCHIATRIC BULLETIN will particularly want to read the classification of mental disorders, the chapter on the etiology of alcoholism, and also the

speculative essay on the future of psychoanalysis. The author's prefatory notes and annotations are instructive as well as good reading.

CASE STUDIES IN CHILDHOOD EMOTIONAL DISABILITIES, Volume II. Edited by G. E. Gardner, Ph. D., M. D. Pp. 368. Price \$5. New York, American Orthopsychiatric Association, 1956.

The first volume of case material in the Workshop Series from the American Orthopsychiatric Association appeared in 1953. This second volume presents an additional group of 15 studies of childhood behavior and emotional disorders. The material is based on studies of school-age children, and was selected by members of the Association in the three fields of Child Psychiatry, Clinical Psychology, and Psychiatric Social Work. The intent of this volume, as of the former is to offer diversified case material for educational, diagnostic, and therapeutic purposes. The discussions are included with the papers.

HUMAN ENGINEERING

Johnson O'Connor

About the author: Johnson O'Connor is a pioneer in psychometrics. He received both A.B. and A.M. degrees from Harvard, after which he did research in astronomy, mathematics, and metallurgy until 1920. He organized the Human Engineering Laboratory at the General Electric Company in 1922. He has been lecturer and professor of psychology at several universities, including Stevens Institute of Technology, and Massachusetts Institute of Technology.

THE HUMAN ENGINEERING LABORATORY was founded in 1922. Its major purpose was to devise tests for measurement of aptitudes requisite for success in various occupations. On the basis of these tests, an individual can be helped to choose the occupation for which he is best suited.

Manual dexterity

The simplest of the tests is one for *finger dexterity*, a manipulative skill used by factory assembly workers, scientists in experimental work, and surgeons. The test, which involves placing 300 metal pins in a board, can be completed by some individuals in five minutes. Less skillful persons may take twice as long. From various experiments in the laboratory, *tweezer dexterity* was found to be a distinctly separate skill from finger dexterity. It was further discovered that a person with finger dexterity does not necessarily have tweezer dexterity also, although both skills necessitate use of the first two fingers and thumb. For example, miniature instrument assemblers usually have tweezer dexterity but little finger dexterity. Dentists score high in tweezer dexterity. Surgeons apparently use both skills, whereas nurses average higher scores in finger dexterity than in tweezer dexterity.

Structural visualization

A structural visualization test was designed as an objective test to separate trained and untrained personnel. The objectivity of the test was validated by timing a group of young men before they received engineering training, because engineers who score high on the test could have done so because of experience.

In a follow-up study of 400 untrained individuals, 100 made a grade of A, 100 made B, 100 made C, and 100 made D. Seventy of these who made A's continued in engineering for ten years. Only two individuals who had made grades of D remained in the profession. However, ten years later, they were equally as successful as those who had made A's.

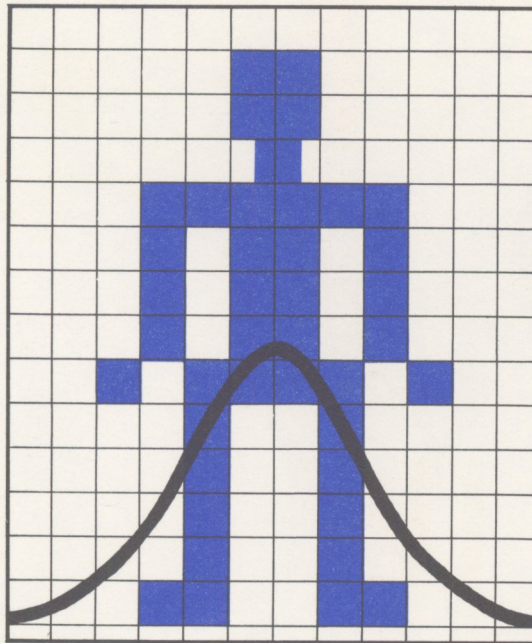
The conclusion was, therefore, that in all probability, a person can never be told authoritatively that he is absolutely unfitted for engineering, or for any other profession. Some prediction of relative chances of success, however, can be made. For example, the chances of a successful career in engineering of a person who scores A in structural visualization are about 70 in 100. For the person who grades D, chances of success are about two in 100. Other occupations to which the visualization test is related include die-making, toolmaking, medicine, and architecture. Low scores on this test were consistently made by writers, accountants, lawyers, salesmen, and advertising men. These endeavors involve more abstract concepts than do architecture, engineering, and surgery.

Personality tests

Scores in personality aptitude tests show a bimodal distribution, with an approximate three-fourths in the *objective* group and one-fourth in the *subjective* group. Individuals in the smaller subjective group have difficulties inherent to any minority group. Although many subjective individuals try to imitate the larger group, in general, they continue secretly to rebel against objective uniformity. Probably the best-adjusted of the subjective persons and those who more nearly express their own aptitudes are those who choose an individualistic existence. Usually, persons who score as subjective types are artists, actors, writers, musicians,

surgeons, and research scientists, while those who score as objective are people in advertising, salesmen, and executives, or those who choose other business occupations.

For awhile, workers in the Human Engineering Laboratory believed that subjective men or women should work alone. This, however, is incorrect in that subjective individuals



need human contacts also, but with individuals, rather than with groups, and the contacts should not be so constant as in selling.

Despite years of experience with the personality test, members of the staff can rarely predict how an individual will score. In general, however, the individual whose superficial behavior corresponds to the test score seems better adjusted, more at ease, and, in some way, happier. An impersonal test score often helps a person to see himself more clearly, and thus to accept his limitations as well as his abilities.

Inductive reasoning

Another aptitude for which tests have been devised is called inductive reason. Scores in the inductive reasoning test improve rapidly with the age of the individual, reach a peak at about 21, and deteriorate rapidly after age 24. Actually, historical evidence supports the findings to a great extent. For instance, by the age of 23 Isaac Newton had developed the binomial theorem and the basis of calculus. Albert Einstein announced the theory of relativity at

age 26, and Linnaeus published his classification of plants at age 28. Carnot published the steam cycle at the same age; and Bohn announced his theory of the structure of the atom before age 30. One conclusion is obvious. Under present conditions in the United States young persons at the peak of their inductive aptitudes have neither opportunity nor encouragement for basic research. Although this country is justly noted for its applied engineering, progress in pure science is undoubtedly retarded by this lack of opportunity.

Conclusion

A major misconception is the belief that test results are an absolute indication of aptitudes and abilities. Complete dependence on such testing as a guide to choice of occupation is more harmful than helpful, because these tests are not sufficiently accurate to be absolute determinants. Nevertheless, such tests are valuable in helping the individual choose an occupation for which he has the greatest ostensible aptitude and ability. A single interest, for which a person has an outstanding ability that is inconsistent with his total aptitude pattern, should not be wasted. Rather, such an ability should be used profitably as an avocation.

There are now eight locations in the United States where these particular aptitude tests can be taken: Boston, New York, Philadelphia, Detroit, Chicago, Tulsa, Fort Worth, and Los Angeles. In addition, for the past two years a laboratory has been in operation in Mexico City during the months of July and August.

Editor's note: In addition to the availability of tests in human engineering many communities have centers in which a more generalized aptitude testing may be obtained. Testing centers are maintained in many colleges and universities throughout the country, and much basic research has been done in these institutions.

Suggested Reading

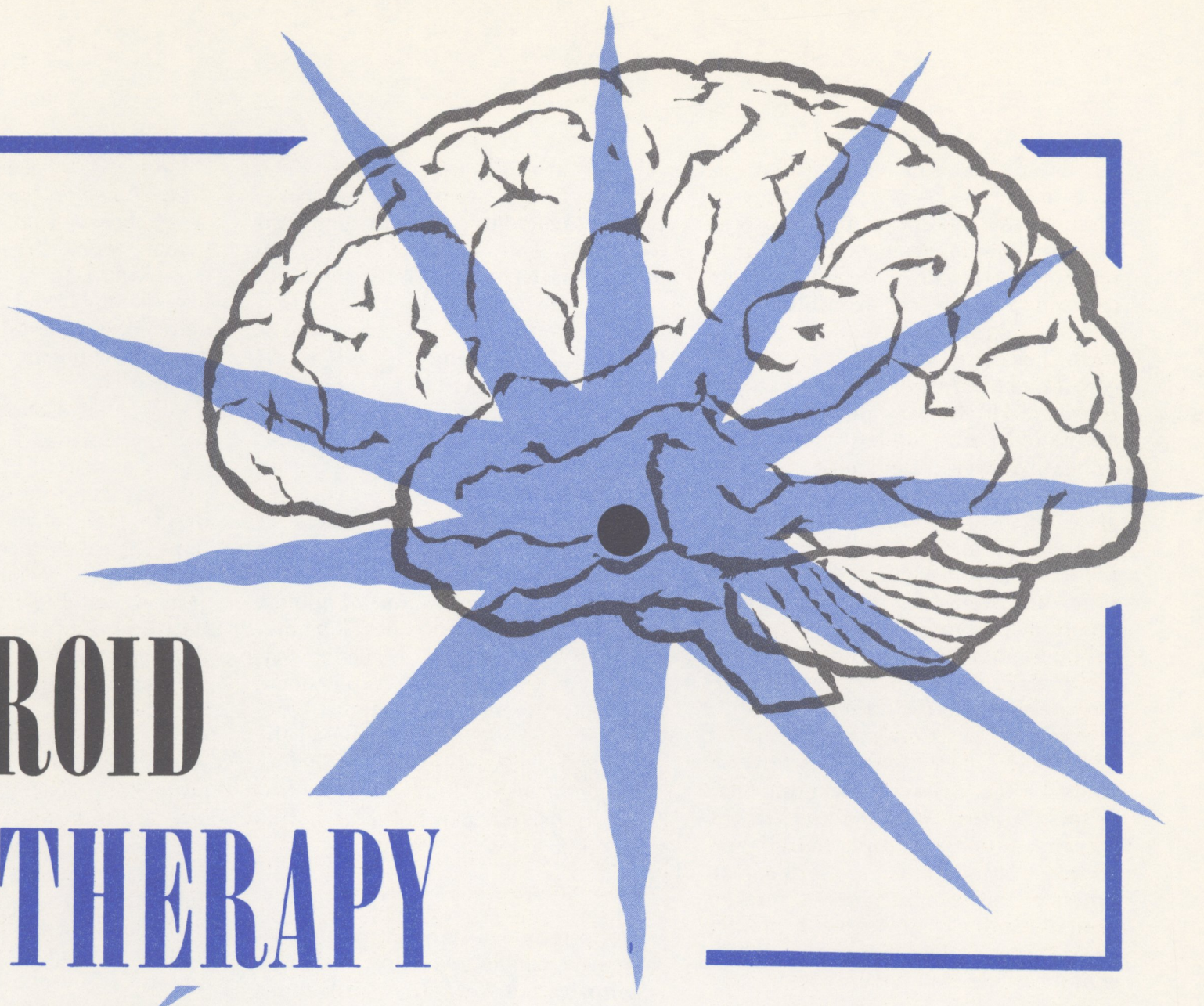
Broadley, C. V., and Broadley, M. C.: *Know Your Real Abilities*, New York, Permabooks, 1950, p. 246.

O'Connor, J.: *Johnson O'Connor English Vocabulary Builder*, Volumes I and II, Boston, Human Engineering Laboratory, 1948, 1953.

O'Connor, J.: *Structural Visualization*, Boston, Human Engineering Laboratory, 1943, p. 190.

O'Connor, J.: *The Unique Individual*, Boston, Human Engineering Laboratory, 1948, p. 250.

STEROID THERAPY



● THE USE OF STEROID HORMONE therapy has become increasingly accepted in recent years. Cortisone therapy alone is effective, for example, in cases of acrosclerosis, asthma, scleroderma, and ulcerative colitis. Steroid hormone administration, however, may produce undesirable psychologic side effects, and these side effects may obscure the clinical course of the disease. For example, the elevation of mood often produced by steroid hormones may be misconstrued as alleviation of symptoms. Excessive therapy may produce a variety of psychologic reactions, from mild euphoria to obvious psychotic episodes. Consequently, cognizance of personality alterations that can result from hormone therapy will enable the physician to evaluate the patient's condition more accurately.

Cortisone therapy

The most commonly used steroid hormones are cortisone, estrogen, and testosterone. Of those, cortisone produces the most severe reactions. Fifty per cent of all patients treated with this hormone may be expected to

experience at least moderate side effects. Frank psychotic reactions, although they may occur, are extremely rare. In the majority of cases, there is spontaneous remission of severe psychologic reactions several weeks after cessation of therapy.

The duration and severity of neurotic or psychotic reactions depend upon several variable factors. The size and frequency of dosage and the total amount of cortisone are apparently the most decisive ones. For example, a therapeutic regimen in which 100 mg. or more of cortisone is given daily will produce some aberrant reactions.

Rome and Braceland have described four distinct psychologic states produced by cortisone therapy. The first stage or Grade I includes euphoric reactions with acceleration of mental processes. Usually there is no correlation between the subjective sense of well-being and actual amelioration of symptoms. The patient may, for example, state that he feels better after treatment, although there is no actual improvement in his physical status. The second stage

or Grade II represents an intensification of the initial reactions, and the accelerated mentation and heightened mood may impair judgment. The increased stimulation of this stage is characterized by improved appetite, greater muscular strength, and hyperactivity. Insomnia is a frequent result of hyperactivity and may be refractory to sedation. Grade III, although uncommon, may be described as a "limbo" stage in which there may be mental deterioration but no frank psychosis. Patients sometimes develop severe anxiety which is not necessarily related to the clinical course of the illness. Phobias, obsessional preoccupations, and mood lability are evident. Rome and Braceland state that this stage is characterized by "every clinical type of psychiatric reaction to stress short of overt psychosis. . . ." Grade IV is characterized by psychotic reactions. The patient may have delusions, hallucinations, or other disturbances.

The degree of personality adjustment before cortisone therapy is another variable factor in the development of psychotic or neurotic

reactions. There is evidence that the type and degree of psychotic behavior produced by therapy result from pre-existent emotional instability. In a report of psychologic reactions after cortisone therapy, for example, Rome and Braceland state that "... the form these reactions take reflects the ego characteristics of the patient. Particularly the ego defenses characteristic of him under stress determine, as it were, the choice of symptoms." Tourney supports this view also, and states that the psychotic reaction is an exacerbation of the patient's premorbid status. In contrast, however, Lidz and co-workers reported that even among "highly unstable and poorly integrated individuals" many experienced no "un-toward emotional reaction as a result of ACTH or Cortisone therapy." Clark and co-workers reported a study of ten cases of psychosis that developed after cortisone and ACTH therapy. The authors found "no characteristics of the premorbid personality that might enable one to anticipate the occurrence or predict the severity or duration of psychiatric complications in a given case."

Estrogen therapy

In contrast to effects produced by adrenal cortical steroids, estrogenic compounds apparently do not cause extreme psychologic reactions. Although estrogen does have some effect on psychologic function, the effects on physiologic function apparently are much greater. One of the most obvious effects, of course, is the increase in development of secondary female sex characteristics. Only minimal physical effects are produced by estrogen therapy in patients with normal physical development. Patients with hypogonadism, however, show increased development of secondary sex characteristics. In these patients, there may also be concomitant psychological maturation. Undoubtedly, this psychosexual maturation is facilitated by creation of a more acceptable body image.

Caldwell and Watson have reported an experimental study in elderly women. In the 30 patients studied, the mean age was 75 years. The experimental group was given placebos. Over a period of 18 months, tests were made of intellectual function, speed and flexibility of reaction, and also

relevant attitudes and interests. The authors found significant improvement, particularly in memory and learning. They concluded that the overall pattern of results tends to support the original hypothesis that improvements in intellectual functioning of the subjects will result from such treatment."

Estrogen is often used in the treatment of patients with advanced cancer of the prostate, and, in most cases, usually causes diminution of sex drive. The antagonistic effects of estrogen and testosterone are the probable reason. Patients are often disturbed by diminution of libido, especially if impotence develops and if virility is believed to be permanently jeopardized. The physician may help prevent some of this emotional disturbance if he explains the possible results of estrogens before therapy is begun and gives the patient supportive psychotherapy during actual hormone treatment.

Testosterone therapy

Testosterone does not produce severe psychologic reactions, although administration of the exogenous androgens may cause some psychologic alteration. For example, testosterone replacement therapy in prepubescent male patients with hypogonadism may cause increased development of male secondary sex characteristics. As a consequence of physical development, psychosexual maturation may be facilitated.

In some cases of castration, there may be loss of sexual activity. Frequently, the diminished sexual activity may be compensated with testosterone administration. In healthy individuals, although spermatogenesis may be diminished, sex drive may be increased when testosterone is given. In both male and female patients, testosterone therapy may cause mild euphoria similar to the effects that result from cortisone treatment.

The influence of testosterone on female sexual drive was first suggested by Groome in 1939, and in 1951 Foss reported a study of the effects of testosterone therapy in ten patients with advanced breast cancer. Nine of these patients experienced increased libido. Foss concluded that, "possibly androgens may be the normal factor influencing the sexual

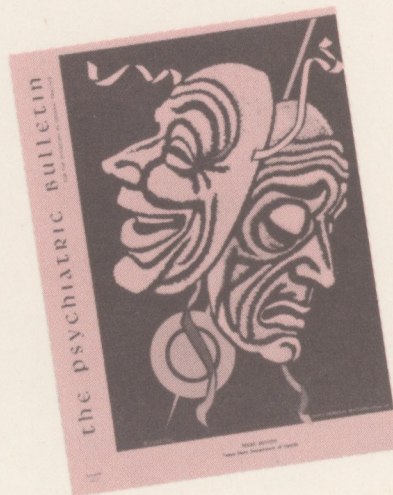
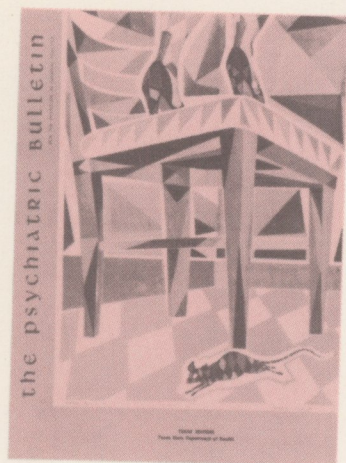
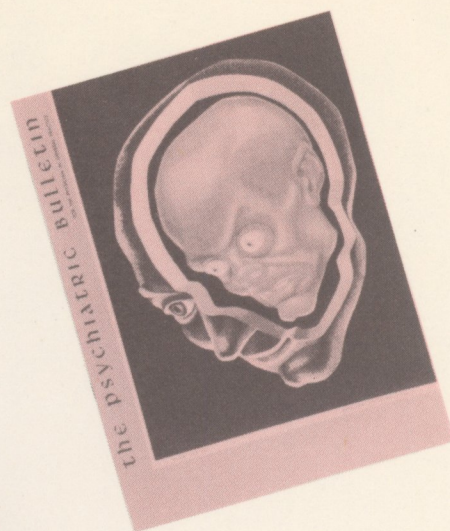
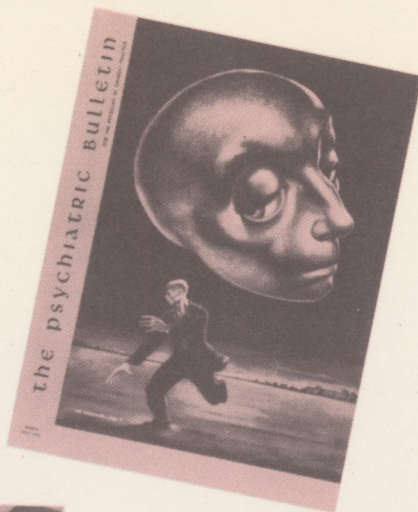
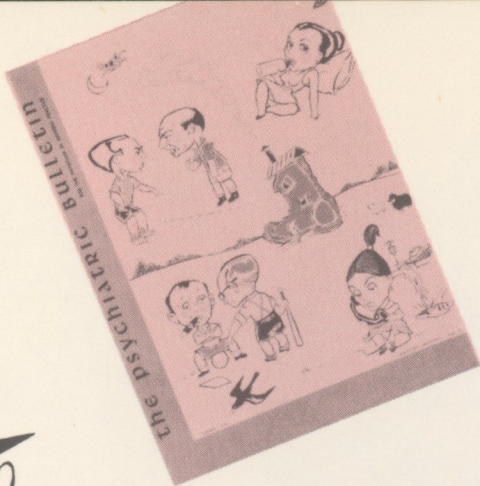
behavior. . . ." More recently, however, Wheeler has reported a study of 36 breast cancer patients, 18 of whom were treated with testosterone, and 18 given placebos. This investigator found that, "significantly more experimental than control patients responded . . . with an increase in sex drive."

Conclusion

Experimental investigation of the effects of steroid hormones to human subjects has necessarily been limited. Besides the obvious ethical limitations, there is also the necessity to control such variable factors as suggestion, intelligence, socio-economic status, and endocrine status. Within the past five years, however, the therapeutic use of hormones has afforded much valuable information about the psychologic effects of the steroid hormones. Consequently, the preferred procedure in hormone therapy is limitation of daily dosage to the minimal amount necessary to reduce symptoms of basic organic disorders. In all cases in which steroid hormone reactions decrease the patient's efficiency, a reduction in the amount of dosage usually eliminates unfavorable psychologic reactions.

Suggested Reading

- Caldwell, B. McD.: An Evaluation of Psychological Effects of Sex Hormone Administration in Aged Women: II. Results of Therapy after Eighteen Months. *J. Geront.* 9:168 (April) 1954.
- Caldwell, B. McD., and Watson, R. I.: An Evaluation of Sex Hormone Replacement in Aged Women, *J. Genet. Psychol.* 85:181 (Dec.) 1954.
- Chance, J., et al: Effects of Cortisone on Psychiatric Patients, *Psychosom. Med.* 16:516 (Nov.-Dec.) 1954.
- Clark, L. D., et al: Preliminary Observations on Mental Disturbances Occurring in Patients under Therapy with Cortisone and ACTH, *New Eng. J. Med.* 246:205 (Feb. 7) 1952.
- Foss, G. L.: The Influence of Androgens on Sexuality in Women, *Lancet* 1:667 (Mar. 24) 1951.
- Groome, J. R.: A Local Use for Testosterone, In: Notes, Comments and Abstracts Section, *Lancet* 2:722 (Sept. 23) 1939.
- Lidz, T., et al: Effects of ACTH and Cortisone on Mood and Mentation, *Psychosom. Med.* 14:363 (Sept.-Oct.) 1952.
- Rome, H. P.: Certain Psychodynamic Aspects of the Role of Cortisone and Allied Substances in the Production of Psychologic Responses. *Proc. Staff Meet. Mayo Clinic* 28:649 (Nov. 18) 1953.
- Rome, H. P., and Braceland, F. J.: The Psychological Response to ACTH Cortisone, Hydrocortisone, and Related Steroid Substances, *Am. J. Psychiat.* 108:641 (Mar.) 1952.
- Tourney, G., and Gottlieb, J. S.: Psychotic Reactions Associated with ACTH and Cortisone, *J. Iowa St. Med. Soc.* 42:292 (July) 1952.
- Wheeler, J. I.: Psychological Effect of the Male Sex Hormone on Women, *Am. Psychologist* 10:348 (Aug.) 1955.



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Vienna, 1932.

